



PATENT LAID-OPEN (A)

No. Sho 51-124578

October 30, 1976

Application No.:	Sho 50-48628
Filing Date:	April 23, 1975
Applicant:	Ryuichi Endo
Inventor:	Ryuichi Endo
Int. Cl ² :	C 05 D 1/00
	A 01 N 7/02

SPECIFICATION

1. Title of the Invention

Aqueous solution-form soil conditioning fertilizer

2. Claim

An aqueous solution-form soil conditioning fertilizer comprising an acrylamide-potassium acrylate copolymer.

3. Detailed Description of the Invention

The present invention relates to an aqueous solution-form soil conditioning fertilizer which imparts to soil excellent water-resistant aggregation ability and water permeability as well as water retention property and, further which is useful mainly as a fertilizer having a delayed action with respect to nitrogen and potassium.

Conventionally, as a soil conditioning agent, synthetic polymers, such as polyvinyl alcohol, polysodium acrylate, polyacrylamide, and derivatives thereof, have been known. However, in many cases, these polymers have a problem in that the resultant water-resistant aggregates

- 3 -



Amendment

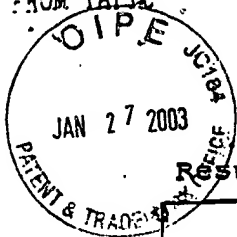
January 27, 1977

Ishiro Katayama, Commissioner, Patent Office, Esq.

1. Indication of the Case
Japanese Patent Publication No. Sho 50-48628
2. Title of the Invention
Aqueous solution-form soil conditioning fertilizer
3. Person amending
Name: Ryuichi Endo
4. Subject to be amended
Column of Detailed Description of the Invention in the specification
5. Content of Amendment
Add the following amendment to the specification.
 - 1) Insert the following after the last line of page 5 of the publication.
"Germination examination"
 1. Purpose of examination
The effect of the acrylamide-potassium acrylate copolymer on the germination of pakchoi is examined.
 2. Examination method
 - a) A test liquid composite fertilizer and a control liquid composite fertilizer are as follows.

The control liquid composite fertilizer comprises 30 parts by weight of $(\text{NH}_2)_2\text{CO}$, 15 parts by weight of K_2HPO_4 ,

2002年10月 28(木) 15:37/15:34/文書番号4802740334 P 11



Results of inspection of germination and growing state

Section	N (mg)	Germination rate (%)			Number of seed leaves developed (piece)		
		Nov. 2	Nov. 3	Nov. 5	Nov. 5	Nov. 7	Nov. 10
Test liquid composite fertilizer	200	40.0	98.0	100.0	3.5	24.0	24.5
	300	34.0	96.0	98.0	4.0	24.0	24.0
	400	36.0	100.0		5.0	23.0	25.0
	500	38.0	98.0	100.0	6.5	20.0	24.5
Control liquid composite fertilizer	200	32.0	98.0	100.0	4.0	24.5	25.0
	300	34.0	96.0	98.0	5.0	22.0	24.0
	400	28.0	96.0	96.0	5.0	23.5	24.0
	500	36.0	98.0	100.0	5.5	22.0	24.5
No fertilizer	0	32.0	98.0	100.0	7.0	24.5	24.5

Results of inspection of grown plants

Section	N (mg)	Leaf length (cm)	Leaf width (cm)	Green leaf weight (g)
Test liquid composite fertilizer	200	13.5	2.8	24.2
	300	14.0	2.7	23.4
	400	12.0	2.5	22.1
	500	11.0	2.0	20.6
Control liquid composite fertilizer	200	14.0	2.9	23.8
	300	13.5	2.6	23.8
	400	12.5	2.6	22.9
	500	11.0	1.9	20.6
No fertilizer	0	7.5	1.5	10.5

Observations

The test fertilizer did not particularly adversely affect the germination or the growing state after germination of pakchoi (crucifer), as compared with the control liquid composite fertilizer.

(Examined in Japan Fertilizer Approval Association)

RECEIVED
JAN 29 2003
TECH CENTER 1600/2900
Association